Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Canceled)

2.   (Currently Amended) A mobile wireless terminal apparatus in a mobile wireless communication system which has a public network, a private network and a public wireless LAN system and comprises:

a virtual private network relay apparatus which establishes an IPsec tunnel with a network relay apparatus installed on the private network via the public network, further establishes the IPsec tunnel with the mobile wireless terminal apparatus and relays connection of the mobile wireless terminal apparatus from the public wireless LAN system to the private network,

a connection authentication server that is installed on the public wireless LAN system and authenticates connection of the mobile wireless terminal apparatus to the public wireless LAN system, and

a wireless LAN access point that relays connection authentication procedures of the public wireless LAN performed between the mobile wireless terminal apparatus and the connection authentication server, the mobile wireless terminal apparatus comprising:

an authentication processing section that performs authentication processing for connection to the public wireless LAN system and to the connection authentication server;

an address acquiring section that acquires an IP address of the virtual private network relay apparatus from the connection authentication server when the connection to the public wireless LAN system is permitted;

2

an address notifying section that sends an IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus that performs an IPsec key exchange with the mobile wireless terminal apparatus using the IP address of the mobile wireless terminal, via the connection authentication server, when the connection to the public wireless LAN system is permitted; and

an IPsec key exchanging section that performs [[an]]the IPsec key exchange with the virtual private network relay apparatus using the IP address of the virtual private network relay apparatus, wherein the IPsec key exchange is performed by IPsec main mode.

3-4.   (Canceled)

5.   (Currently Amended) A mobile wireless terminal apparatus in a mobile wireless communication system which has a public network, a private network and a public wireless LAN system and comprises:

a virtual private network relay apparatus which establishes an IPsec tunnel with a network relay apparatus installed on the private network via the public network, further establishes the IPsec tunnel with the mobile wireless terminal apparatus and relays connection of the mobile wireless terminal apparatus from the public wireless LAN system to the private network,

a home agent that controls movement of the mobile wireless terminal apparatus,

a connection authentication server that is installed on the public wireless LAN system and authenticates connection of the mobile wireless terminal apparatus to the public wireless LAN system, and

a wireless LAN access point that relays connection authentication procedures of the public wireless LAN performed between the mobile wireless terminal apparatus and the connection authentication server, the mobile wireless terminal apparatus comprising:

3

an authentication processing section that performs authentication processing for connection to the public wireless LAN system and to the connection authentication server;

an address acquiring section that acquires an IP address of the virtual private network relay apparatus from the connection authentication server when the connection to the public wireless LAN system is permitted;

an address notifying section that sends an IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus that performs an IPsec key exchange with the mobile wireless terminal apparatus using the IP address of the mobile wireless terminal, via the connection authentication server, when the connection to the public wireless LAN system is permitted;

an IPsec shared key acquiring section that acquires an IPsec pre-shared secret key, from the connection authentication server, for use in [[an]]the IPsec key exchange performed with the virtual private network relay apparatus;

an MIP shared key acquiring section that acquires an MIP pre-shared secret key, from the connection authentication server, for use in mobile IP registration with the home agent;

an IPsec key exchanging section that performs exchange of the IPsec key exchange with the virtual private network relay apparatus using the IPsec pre-shared secret key, wherein the IPsec key exchange is performed by IPsec main mode; and

an MIP registering section that initiates the mobile IP registration to the home agent using the MIP pre-shared secret key.

6-14.   (Canceled)

15.   (Currently Amended) A mobile wireless terminal apparatus comprising:

an authentication processing section that performs authentication processing for connection to a public wireless LAN system and to a connection authentication server;

4

an address acquiring section that acquires an IP address of a virtual private network relay apparatus from the connection authentication server when the connection to the public wireless LAN system is permitted;

an address notifying section that sends an IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus that performs an IPsec key exchange with the mobile wireless terminal apparatus using the IP address of the mobile wireless terminal, via the connection authentication server, when the connection to the public wireless LAN system is permitted; and

an IPsec key exchanging section that performs [[an]]the IPsec key exchange with the virtual private network relay apparatus using the IP address of the virtual private network relay apparatus, wherein the IPsec key exchange is performed by IPsec main mode.

16.   (Currently Amended) A mobile wireless terminal apparatus comprising:

an authentication processing section that performs authentication processing for connection to a public wireless LAN system and to a connection authentication server;

an address acquiring section that acquires an IP address of a virtual private network relay apparatus from the connection authentication server when the connection to the public wireless LAN system is permitted;

an address notifying section that sends an IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus that performs an IPsec key exchange with the mobile wireless terminal apparatus using the IP address of the mobile wireless terminal, via the connection authentication server, when the connection to the public wireless LAN system is permitted;

an IPsec shared key acquiring section that acquires an IPsec pre-shared secret key, from the connection authentication server, for use in [[an]]the IPsec key exchange performed with the virtual private network relay apparatus;

5

an MIP shared key acquiring section that acquires an MIP pre-shared secret key, from the connection authentication server, for use in mobile IP registration with a home agent;

an IPsec key exchanging section that performs ~~exchange of~~ the IPsec key exchange with the virtual private network relay apparatus using the IPsec pre-shared secret key, wherein the IPsec key exchange is performed by IPsec main mode; and

an MIP registering section that initiates the mobile IP registration to the home agent using the MIP pre-shared secret key.

17.   (New) The mobile wireless terminal apparatus according to Claim 2, wherein an IPsec tunnel is statically established between the virtual private network relay apparatus and the connection authentication server.

18.   (New) The mobile wireless terminal apparatus according to Claim 2, wherein

the address acquiring section that acquires the IP address of the virtual private network relay apparatus from the connection authentication server uses a communication path encrypted by a key generated when the connection authentication server succeeds in authenticating the mobile wireless terminal apparatus, and

the address notifying section that sends the IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus uses the communication path.

19.   (New) The mobile wireless terminal apparatus according to Claim 5, wherein an IPsec tunnel is statically established between the virtual private network relay apparatus and the connection authentication server.

20.   (New) The mobile wireless terminal apparatus according to Claim 5, wherein

the address acquiring section that acquires the IP address of the virtual private network relay apparatus from the connection authentication server uses a communication path encrypted

by a key generated when the connection authentication server succeeds in authenticating the mobile wireless terminal apparatus, and

the address notifying section that sends the IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus uses the communication path.

21.   (New) The mobile wireless terminal apparatus according to Claim 15, wherein an IPsec tunnel is statically established between the virtual private network relay apparatus and the connection authentication server.

22.   (New) The mobile wireless terminal apparatus according to Claim 15, wherein

the address acquiring section that acquires the IP address of the virtual private network relay apparatus from the connection authentication server uses a communication path encrypted by a key generated when the connection authentication server succeeds in authenticating the mobile wireless terminal apparatus, and

the address notifying section that sends the IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus uses the communication path.

23.   (New) The mobile wireless terminal apparatus according to Claim 16, wherein an IPsec tunnel is statically established between the virtual private network relay apparatus and the connection authentication server.

24.   (New) The mobile wireless terminal apparatus according to Claim 16, wherein

the address acquiring section that acquires the IP address of the virtual private network relay apparatus from the connection authentication server uses a communication path encrypted by a key generated when the connection authentication server succeeds in authenticating the mobile wireless terminal apparatus, and

the address notifying section that sends the IP address of the mobile wireless terminal apparatus to the virtual private network relay apparatus uses the communication path.